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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/072,963 05/05/98 KESSLER

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QM12/0315

EXAMINER

MANTIS MERCADERE

ART UNIT

PAPER NUMBER

3737

DATE MAILED:

03/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/072,963

Applicant(s)

Kessler

Examiner

Eleni Mantis Mercader

Group Art Unit

3737



☒ Responsive to communication(s) filed on May 5, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-25 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-25 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103[®] and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 112

1. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 10, 13 and 23 the use of the term "thereby" is functional and does not define any structure and accordingly can not serve to distinguish.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 7-18, 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Denk (patent # 5,034,613).

Denk teaches a method for the imaging of a particular volume of a plant or animal tissue wherein the plant or animal tissue contains the steps of:

(a) treating the particular volume of the plant or animal tissue with light sufficient to promote a simultaneous two-photon excitation of the photo-active molecular agent contained in the particular volume of the plant or animal tissue (col. 2, lines 33-35);

(b) photo-activating at least one of the at least one photo-active molecular agent in the particular volume of the plant or animal tissue, thereby producing at least one photo-activated molecular agent, wherein the at least one photo-activated molecular agent emits energy (col. 2, lines 55-62);

(c) detecting the energy emitted by the at least one photo-activated molecular agent (col. 2, lines 64-65); and

(d) producing a detected energy signal which is characteristic of the particular volume of the plant or animal tissue (col. 2, col. 59-63).

Denk teaches the use of focused laser light for simultaneous two-photon excitation of the photo-active molecular agent (col. 2, lines 38-39 and col. 2, lines 55-62).

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Denk also teaches the use of biologically active chemicals (col. 8, lines 40-46) or photo active molecular agents (col. 7, lines 60-68).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denk et al. (Patent # 5,034,613) in view of Buckley et al. .

Denk et al. teach all the features of the instant invention except for the use of psoralen as a fluorophore. In the same field of endeavor Buckley et al. uses psoralen. It would have been obvious to one skilled in the art at the time the invention was made to have used psoralen as a fluorophore in the method of Denk et al. as an alternative fluorophore.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prasad et al. teach two-photon upconverting dyes and applications.

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Suzuki et al. teach an optical storage medium and process.

Mukherjee et al. teach a nonlinear spectrophotometer.

Hmannimen et al. teach a luminescence scanning microscopy.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni Mantis Mercader whose telephone number is (703) 308-0899. The examiner's supervisor, Mr. Marvin Lateef, can be reached on (703) 308-3256.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. The fax phone number for this group is (703) 308-0758.



Marvin M. Lateef
Supervisory Patent Examiner
Group 3700



EMM
December 17, 1999.